

10/566431

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : National Phase Entry of PCT/EP2004/006314
Applicant : MASSELINK et al
Filed : January 31, 2006
TC/A.U. :
Examiner :

RECEIVED 31 JAN 2006

Docket No. : 3367-101
Customer No. : 6449
Confirmation No. :

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

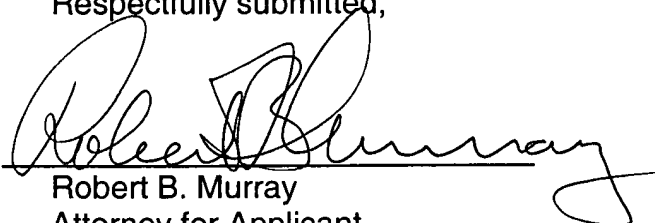
Sir:

In compliance with applicants duty of disclosure under 37 C.F.R. 1.56, enclosed is a copy of the International Search Report in the corresponding international application. The relevance of the references is noted in the International Search Report. We understand that the references have been forwarded by the International Bureau, and are available to the Examiner, but if the Examiner needs copies of any of the references, the Examiner is requested to advise counsel accordingly. Also listed on the 1449 are references that are known to the applicant. Also enclosed is an English translation of an office action in the corresponding German priority application and, the cited references are also listed on the attached 1449. A copy of all of the non-US patent references will follow.

In the event that any fees are due with this paper, please charge our Deposit Account No. 02-2135.

Respectfully submitted,

By


Robert B. Murray

Attorney for Applicant

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RBM/cb

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Complete if Known	
				Application Number	New Application 12/566431
				Filing Date	January 31, 2006
				First Named Inventor	MASSELINK et al
				Group Art Unit	
				Examiner Name	
				Confirmation No.	
Sheet	1	of	4	Attorney Docket Number	3367-101

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	1.	2002/162995	A1	Horguchi Naoto NMI et al	11/7/02
	2.	2003/052317	A1	Ohshima Toshio	3/20/03
	3.	2003/059998	A1	Holonyak et al	3/27/03
	4.	2002/075924	A1	Mukai Koki	6/20/02
	5.	6,423,980		Sumith V. Bandara	7/23/02
	6.	6,521,967		Sumith V. Bandara	2/18/03
	7.	6,541,788		Petroff	4/1/03
	8.	5,963,571		Wingreen	10/5/99
	9.	6,573,527		Sugiyama	6/3/03
	10.	6,239,449	B1	Simon Fafard	5/29/01

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code. ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

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				Examiner Name	
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office ³ Code	Number ⁴	Kind ⁵ (if known)			
	11.	GB	2 352 087	A	Toshiba Res Europ Ltd.	1/17/01	
Examiner Signature					Date Considered		

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				Confirmation No.	
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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
	12.	Mikhailov SA., "A New Type of Tunable Solid-State Far-Infrared Lasers", CONF LASERS ELECTRO OPT EUR TECH DIG, 14 September 1998, pg. 92		
	13.	Walter et al., "Room-temperature continuous photopumped laser operation of coupled InP quantum dot and InGaP quantum....", APPLIED PHYSICS LETTERS, VOL. 79, No. 13, 24 September 2001., pgs. 1956-1958.		
	14.	Asahi H., "Self-Organized Quantum Wires and Dots in III-V Semiconductors", ADVANCED MATERIALS, vol. 9, no. 13, 3 November 1997, pgs. 1019-1026.		
	15.	Belyaev et al., "Positively charged defects associated with self-assembled quantum dot formation", APPLIED PHYSICS LETTERS, vol.76, no. 24, 12 June 2000, pgs. 3570-3572.		
	16.	B.F. Levine "Quantum-Well-Infrared Photodetectors", Journal of Applied Physics 74, R1-R81, 1993.		
	17.	F. Capasso et al. "Quantum Cascade Laser: "Ultrahigh-Speed Operation, Optical Wireless Communication, Narrow Linewidth, and Far-Infrared Emission", IEEE Journal of Quantum Electronics 38, 511 -532, 2002.		
	18.	J. Phillips et al. "Far-Infrared Photoconductivity in self-organized InAs Quantum Dots ", Applied Physics Letters 72, 2020-2022, 1998.		
	19.	J. Phillips et al. "Self-Assembled InAs-GaAs Quantum-Dot Intersubband Detectors", IEEE Journal of Quantum Electronics 35, 936-943, 1999.		
	20.	H.C. Liu et al. "Quantum Dot Infrared Photodetectors", Applied Physics Letters 78, 79 -81, 2001.		
	21.	L. Rebohle, et al. "Energy Level Engineering in InAs Quantum-Dot Nanostructures", Applied Physics Letters 81, 2079-2081, 2002.		
	22.	B.F. Levine, et al., Applied Physics Letters 52 (1988) 1481.		
	23.	G. Hasnain, et al., Applied Physics Letters 56 (1990) 770.		
	24.	P.M. Mooney, Journal of Applied Physics 67 (1990), R1		

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	25.	A.E. Belyaev et al., Applied Physics Letters 76 (2000), 3570	
	26.	H. Asahi, Advanced Materials 9 (1997), 1019	
	27.	C. Sirtori, et al., Applied Physics Letters 61, 898	
	28.	Chung et al., "Coupled strained-layer InGaAs quantum well improvement of an InAs quantum dot....", APPLIED PHYSICS LETTERS, vol. 79, no. 27, 2001, pgs. 4500-4502.	

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Signature		Considered	

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